

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,288	07/19/2001	Peter Robert Foley	CM2506	2173
27752	7590 04/06/2006		EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			DELCOTTO, GREGORY R	
			ART UNIT	PAPER NUMBER
			1751	· · · · · · · · · · · · · · · · · · ·
			DATE MAILED: 04/06/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/909,288	FOLEY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Gregory R. Del Cotto	1751				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 19 Ja	nuary 2006.					
	action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>57,58,60 and 62-65</u> is/are pending in the application.						
4a) Of the above claim(s) 30-35 is/are withdraw	4a) Of the above claim(s) 30-35 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
7) Claim(s) is/are objected to.		·				
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☒ None of:						
 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		Patent Application (PTO-152)				

Art Unit: 1751

DETAILED ACTION

1. Claims 30-35, 57, 58, 60 and 62-65 are pending. Claims 30-35 have been withdrawn from consideration as being drawn to a non-elected invention. Note that, Applicants arguments and amendments filed 1/19/06 have been entered.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 11/3/05 have been withdrawn:

The rejection of claims 57, 58, 60, and 62-65 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been withdrawn.

The rejection of claims 57, 58, 60, and 62-65 under 35 U.S.C. 103(a) as obvious over Feng (US 5,929,007) in view Culshaw et al (US 5,202,050) and JP 8151597 has been withdrawn.

The rejection of claims 57, 58, 60, and 62-65 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-37 of copending Application No. 11/151027 in view of Feng et al (US 5,929,007) has been withdrawn due to the filing of a terminal disclaimer.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on applications filed in the United States on 7/19/00, 7/25/00, and 12/21/00. It is noted, however, that applicant has not filed a certified copy of the 00/19619, 00/20255, 00/34906, and 00/34907 application as required by 35 U.S.C. 119(b). Additionally, it

Art Unit: 1751

appears that even if priority documents were filed in the past, they are no longer in the file and new certified copies are requested.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 57, 58, 60, and 62-65 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to instant claim 57, the specification, as originally filed, provides no basis for a synthetic smectite clay "having an average platelet size of less than about 100 nm". Additionally, the specification provides no basis for "synthetic" smectite clay. While the specification does provide basis for "synthetic smectite-type clays" having an average platelet size of less than about 100 nm, the specification does not provide basis for synthetic smectite clay or synthetic smectite clay having an average platelet size of less than about 100 nm. Thus, this is deemed new matter. Note that, claims 58, 60, and 62-65 have also been rejected due to their dependency on claim 57.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1751

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1751

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 57, 58, 60, and 62-65 are rejected under 35 U.S.C. 103(a) as obvious over JP 60-141,800 in view Culshaw et al (US 5,202,050), JP 8151597, and Trinh et al (US 6,194,362).

Art Unit: 1751

'800 teaches a liquid detergent composition containing 0.1 to 10% by weight of a swellable clay mineral, 0.1 to 30% of a solvent, 1 to 20% of a surfactant and 0.5 to 30% of an alkali agent. Suitable solvents include diethylene glycol monobutyl ether, etc.

See page 4, lines 10-50. Note that, amine oxide surfactants and monoethanolamine may also be used in the compositions. See page 9, lines 1-30. Suitable additional ingredients include fragrances, dyes, etc. See page 6, lines 1-15. These compositions are used for removing soils from ovens, glass, refrigerators, and other kitchen items.

See page 3, lines 1-10. The product of the invention may be used as-is, and an aerosol or spray—type product is also appropriate from the standpoint of ease of use. See page 6, lines 1-10.

'800 does not specifically teach a smectite clay having a particle size of less than 100 nm and an odor masking perfume comprising an ionone nor a cleaning composition having the specific physical parameters containing a solvent, a smectite clay with a particle size of less than 100 nm, xanthan gum, and odor masking perfume comprising an ionone, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Culshaw et al teach safe and effective hard-surface cleaning compositions which contain a binary mixture of an organic solvent and a narrowly defined chelating agent. See Abstract. Suitable organic solvents include benzyl alcohol, 2-(2-butoxyethoxy)ethanol, 1-(2-n-butoxy-1-methylethoxy)propane-2-ol, etc., and can be used in amounts of from 1% to 20%. See column 5, lines 1-30. In addition to the essential chelating agent/solvent binary mixture, the compositions can contain

Art Unit: 1751

additional ingredients such as surfactants and suitable surfactants include anionic, nonionic, cationic, amphoteric, and zwitterionic surfactants. See column 5, lines 45-69. Also, thickeners may be used in the compositions in amounts from 0.2% to 1.5% and include xanthan gums, smectite clays, etc. See column 6, lines 55-69. Highly desirable ingredients for use include hydrotropes such as monoethanolamine, diethanolamine, triethanolamine, etc. See column 6, lines 15-35. The pH of such compositions will generally be in the range of from 5 to 11. See column 7, lines 50-60.

Culshaw et al do not specifically teach a particle size of less than 100 nm for the smectite clay.

'597 teaches liquid detergent compositions containing a clay mineral having an average particle size of 10 to 5000 nm and anionic and nonionic surfactants. These minerals include montmorillonite, saponite, smectite and swelling mica. See Abstract.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a smectite clay having a particle size of less than 100 nm in the cleaning composition taught by Culshaw et al, with a reasonable expectation of success, because '597 teaches the use of smectite clay having a particle size of less than 100 nm in a similar detergent composition and Culshaw et al teaches the use of smectite clays in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a smectite clay having a particle size less than 100 nm and xanthan gum in the cleaning composition taught by '800, with a reasonable expectation of success, because Culshaw et al in combination with '597 teaches the use of smectite

Art Unit: 1751

clays having a particle size of less than 100 nm and their equivalence to xanthan gum in a similar cleaning composition and further, '800 teaches the use of thickening agents such as swellable clay minerals including smectite-type clay minerals.

Trinh et al teach liquid aqueous, hard surface detergent compositions having improved cleaning and good filming/streaking characteristics comprising from about 0.0015 to about 3% of a blooming perfume composition comprising at least about 50% of blooming perfume ingredients selected from the group consisting of perfume ingredients having a boiling point of less than about 260 degrees Celsius; from about 0.001% to about 2% of a detergent surfactant; from about 0.5% to about 30% of a hydrophobic solvent, and the balance being an aqueous solvent system comprising water and a solvent such as methanol, ethanol, isopropanol, ethylene glycol, propylene glycol, glycol ethers, etc. See column 1, line 55 to column 2, line 30. Suitable perfumes include blooming perfume ingredients and extensive mixtures of perfumes, including ionone, which encompass the blooming perfumes and ionones as recited by the instant claims. See column 6, line 10 to column 10, line 1.

Suitable glycol ethers include monopropylene glycol monopropyl ether, diethyleneglycolmonohexyl ether, monoethyleneglycol monobutyl ether, etc. See column 14, lines 54-65.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a perfume comprising an ionone as recited by the instant claims in the composition as taught by '800, with a reasonable expectation of success, because Trinh et al teach a similar hard surface cleaning composition containing a

John Number. 09/909,20

Art Unit: 1751

perfume comprising an ionone further '800 teach the use of optional components including perfumes.

With respect to the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims, the Examiner asserts that the broad teachings of '800 in combination with Culshaw et al, Trinh et al, and '597 would encompass compositions having the same the flow viscosity, shear thinning properties, pH, and other physical parameters as recited by the instant claims because '800 in combination with Culshaw et al, Trinh et al, and '597 suggest compositions containing the same components in the same proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a detergent composition used in a spray dispenser having the specific physical parameters containing a solvent, a smectite clay having a particle size of less than 100 nm, a xanthan gum, perfume comprising an ionone, and the other requisite components of the composition in the specific amounts as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teachings of '800 in combination with Culshaw et al, Trinh et al, and '597 suggest a detergent composition used in a spray dispenser having the specific physical parameters containing a soil swelling agent, a smectite clay having a particle size of less than 100 nm, xanthan gum, perfume comprising an ionone, and the other requisite components of the composition in the specific amounts as recited by the instant claims.

Response to Arguments

Art Unit: 1751

With respect to '800, Applicant states that '800 does not suggest the use of mixed organic/clay thickeners nor the use of ionone-containing perfumes to mask solvent odors. Furthermore, Applicant states that JP '597 teaches away from the combined use of the two type of thickeners. In response, note that, as stated previously, Culshaw et al teaches the equivalence of clay thickeners to gum thickeners in a similar composition as set forth above; JP '597 is a secondary reference drawn to a cleaning composition and relied upon for its teaching of particle size and not the equivalence of clays to gums or for gum thickeners in general. Note that, it is well settled that where the prior art teaches the equivalence two compounds for the same purpose, it is obvious to use a mixture of the compounds for the same purpose. See MPEP 2144.06 (*In re Kerkoven*).

The Examiner maintains that there is clear motivation to one of ordinary skill in the to use smectite clay of a particular particle size and xanthan gum in the composition taught by '800, with a reasonable expectation of success, because Culshaw in view of JP '597 teaches the equivalence of smectite clay of a particular particle size to xanthan gum in a similar cleaning composition and further, '800 teaches the use of smectite clays in general.

With respect to the odor masking perfume comprising an ionone as now recited by the instant claims, the Examiner has relied on Trinh et al as a secondary reference for its teaching of perfumes comprising ionones. As set forth above, the Examiner asserts that it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a perfume comprising an ionone as recited by the instant

Art Unit: 1751

claims in the composition as taught by '800, with a reasonable expectation of success, because Trinh et al teach a similar hard surface cleaning composition containing a perfume comprising an ionone further '800 teach the use of optional components including perfumes.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

Application/Control Number: 09/909,288 Page 12

Art Unit: 1751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory R. Del Cotto Primary Examiner Art Unit 1751

GRD April 3, 2006